Applicability of SIMAP to Transport Networks

draft-busi-nmop-transport-simap-00

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Motivations

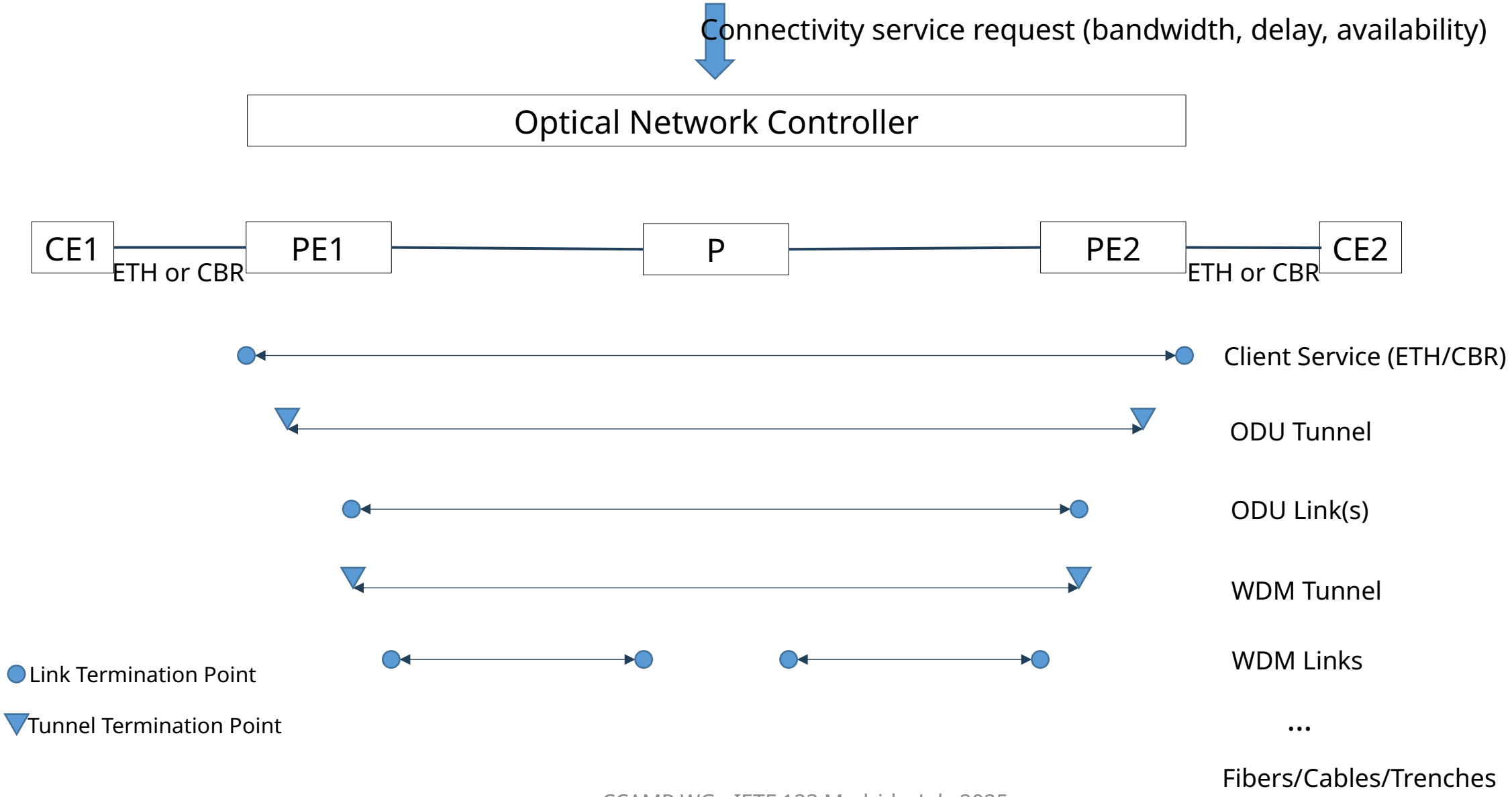
- Service & Infrastructure Maps (SIMAP) is an emerging concept being developed by the NMOP WG
  - ✓ driven by operators
  - ✓ getting some traction
- SIMAP includes (even if it is not limited to) transport networks
  - ✓ OTN and WDM transport networks are included in SIMAP
- Objective of this I-D:
  - ✓ Exploring the impact/applicability of SIMAP concepts to transport networks

Draft Outline

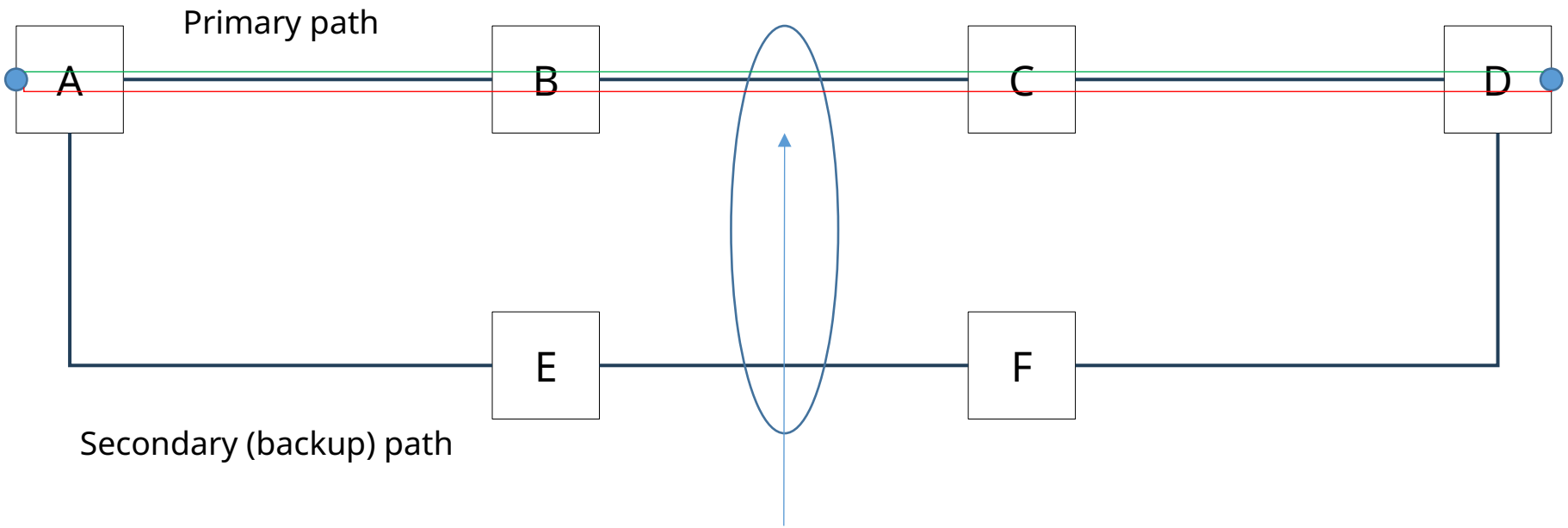
1. Introduction
1.1. Terminology
2. Overview of Key Requirements for Transport SIMAP
2.1. Resource and Bandwidth status
2.2. Delay Measurement
2.3. Availability
2.4. Real-time Evaluation (Risk?)
3. Use Cases
3.1. Service Provisioning
3.2. Alarm and Incident
3.3. Risk Prediction
4. YANG Models Applicability
4.1. Planning and Service Provisioning
4.2. Alarm and Incident
4.3. Risk Prediction
5. Security Considerations
6. IANA Considerations
7. References
7.1. Normative References
7.2. Informative References
Acknowledgments
Authors' Addresses

Main content provided in the -00 version

Service Provisioning UC



Shared Risk Link Group (SRLG)



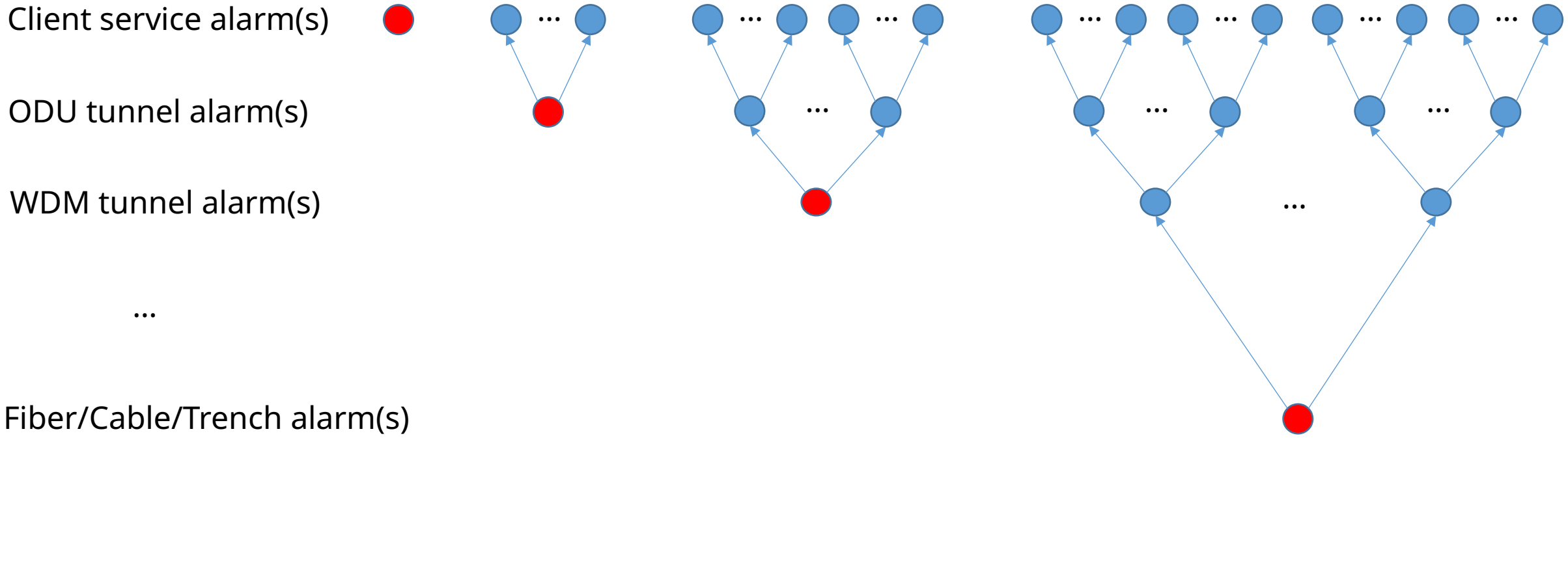
These two links can share a common risk (e.g., have a common fiber, cable or trench):

- SRLG information needs to be taken into account when provisioning a connectivity service with availability requirements

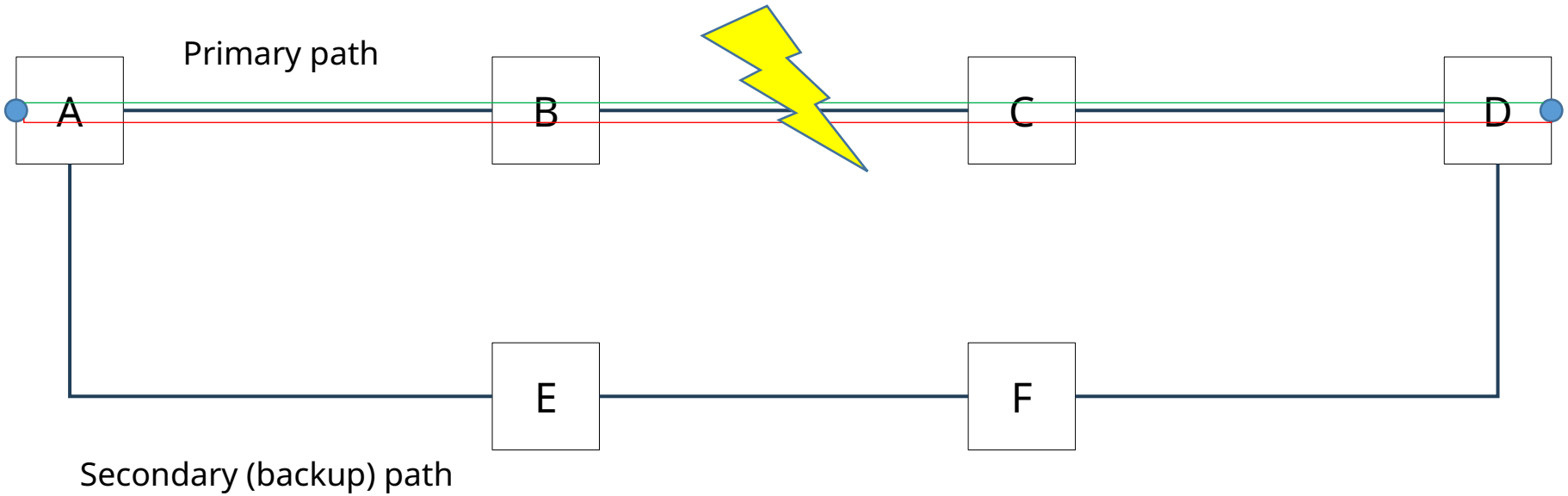
Manual configuration of SRLG is error-prone:

- SRLG information can be automatically provided by the optical controller using co-cabling/co-trenching advanced algorithms

Alarm and Incident UC



Risk Prediction



After a failures occurs on the primary path, protection mechanisms cannot recover any additional failure

- Report the resiliency mechanism in use and its status

Next Step

- Get feedbacks on the interest for this work
  - ✓ Anybody who is interested to contribute, please contact the co-author(s)
- Identify the home WG for this work
  - ✓ Candidates
    - CCAMP is the home for transport network technology-specific work
    - NMOP is the home of SIMAP
  - ✓ No matter which WG is selected as the home WG, need to keep the other WG aligned and informed on the progress of this work
- Complete the missing sections